

CLAIM AMENDMENTS

Please cancel 5 and 7-9, 11, 13-16 and 22-25, and amend claims 3, 6, 10, 17, 19 and 21 as follows:

Claims 1 and 2 (canceled)

3. (currently amended) A method for manufacturing a semiconductor device, comprising:

a step of forming projection electrodes on the surface of the semiconductor substrate,

after said step of forming projection electrodes, a step of forming a surface resin layer on a surface of a semiconductor substrate,

a surface grinding step of exposing the projection electrodes from the surface resin layer by polishing or grinding the surface resin layer,

after said surface grinding step, a step of forming a back side resin layer on a back side of the semiconductor substrate, and

a back side grinding step of thinning the semiconductor substrate by removing the back side resin layer, through polishing or grinding, from the semiconductor substrate provided with the surface resin layer and the back side resin layer, and by further polishing or grinding the back side of the semiconductor substrate from which

the back side resin layer has been removed, in which the surface resin layer and the back side resin layer are so formed as to have substantially the same thicknesses respectively.

Claim 4 (original) A method for manufacturing a semiconductor device as claimed in claim 3, further comprising a cutting out step of cutting out pieces of semiconductor devices by cutting the semiconductor substrate along cutting lines after completing the back side grinding step.

Claim 5 (canceled)

6. (currently amended) A method for manufacturing a semiconductor device as claimed in claim 5 3, in which the surface resin layer is formed in such a manner that the projection electrodes are embedded in the surface resin layer.

Claims 7-9 (canceled)

10. (currently amended) A semiconductor device comprising
a solid device,

a first semiconductor chip bonded onto a surface of the solid device, the solid device including a second semiconductor chip, such that the first and second semiconductor chips define a chip-on-chip structure,

projection electrodes for external connection formed on the surface of the solid device, and

a protective resin layer for sealing the surface of the solid device with head portions of the projection electrodes thereon exposed.

11. (canceled)

Claim 12 (previously presented) A semiconductor device as claimed in claim 10, in which the semiconductor chip is bonded face-down onto the solid device with an active surface of the semiconductor chip opposed to the solid device.

Claims 13-16 (canceled)

Claim 17 (currently amended) A method for manufacturing a semiconductor device, comprising:

a chip bonding step of bonding a plurality of semiconductor chips face-down onto a surface of a semiconductor substrate with active surfaces of the semiconductor chips opposed to the surface of the semiconductor substrate, in such

a manner that the plurality of semiconductor chips and substrate define chip-on-chip structures,

an electrode forming step of forming a plurality of projection electrodes on the surface of the semiconductor substrate,

a resin sealing step of sealing, with a protective resin, the semiconductor chips and the exposed surface of the semiconductor substrate after forming the projection electrodes in such a manner that head portions of the projection electrodes are exposed, and

a cutting out step of taking out individual pieces of chip-on-chip type semiconductor devices by cutting the semiconductor substrate along predetermined cutting lines.

18. (original) A method for manufacturing a semiconductor device as claimed in claim 17, in which the resin sealing step includes an electrode exposing step of exposing the head portions of the projection electrodes by removing a surface layer section of the protective resin.

19. (currently amended) A method for manufacturing a semiconductor device as claimed in claim 18, in which the electrode exposing step includes a chip grinding step of simultaneously polishing or grinding the protective resin and an inactive surface side of the semiconductor chips.

20. (previously presented) A method for manufacturing a semiconductor device as claimed in claim 17, in which a back side of the semiconductor substrate or an inactive surface side of the semiconductor chips is polished or ground before the cutting out step.

Claim 21 (currently amended) A method for manufacturing a semiconductor device as claimed in claim 17, in which each of the projection electrodes are formed with a height such that the top end each projection electrode is between the height of ~~to be higher than~~ the active surface of the semiconductor chips and lower than a ~~height of~~ an inactive surface of the semiconductor chips.

22 – 25 (canceled)